



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: John Ristow

SUBJECT: INSTALLATION OF STOP SIGNS

DATE: January 17, 2019

Approved

D. D. S. L.

Date

1/18/19

RECOMMENDATION

- (a) Adopt a resolution amending Council Policy 8-1, *Criteria for the Installation of Stop Signs*.
- (b) Approve an ordinance amending City of San José Municipal Code Chapter 11.18, *Stop Sign Installation*.

OUTCOME

The proposed updates to Council Policy 8-1 will provide greater opportunities for intersections to qualify for stop signs, particularly within local residential neighborhoods. The proposed changes to City of San José Municipal Code (SJMC) Section 11.18 will incorporate minor administrative amendments.

BACKGROUND

Council Policy 8-1, Criteria for the Installation of Stop Signs

Based upon Caltrans standards, stop signs are installed at intersections to establish right-of-way and enhance safety for all roadway users, and to reduce vehicle delays. Council Policy 8-1 is based on these standards and establishes the criteria used to determine if stop signs should be considered for installation in San José. The policy was initially adopted in 1972 with various revisions occurring in subsequent years, the most recent in 2001. Through each of its revisions, Council Policy 8-1 has remained based on Caltrans standards for when stop signs are most appropriate. The 2001 updates to the policy resulted in greater opportunities for the installation of stop signs where high pedestrian and bicycle activities are present, where pedestrian corridors or zones have been or will be identified in the General Plan, and where multiple schools are located.

SJMC Section 11.18, Installation of Stop Signs

SJMC Section 11.18 provides authority to the Director of Streets and Traffic to initiate studies to determine if stop signs should be installed, and to install or remove stop signs as determined appropriate by the Director. This section also specifies the appeals process for individual(s) who do not agree with the Director's decision to install, or not install, a stop sign at a specific intersection.

ANALYSIS

Council Policy 8-1

Council Policy 8-1 establishes the criteria used to determine if stop signs should be considered for the following types of installations:

- One-Way or Two-Way Stop Signs
- All Way Stop Signs for Non-General Plan Streets
- All-Way Stop Signs for General Plan Streets

The Policy identifies the following factors that must be considered, the warrant points that can be allocated for each factor, and the minimum number of points that are required to warrant installation of stop signs based on the type of installation:

- Crash history, specifically crashes that might have been prevented with the presence of stop control
- Vehicle conflicts at the intersection during a 24-hour period
- Proximity to schools
- Unusual conditions: high pedestrian and bicycle activity, evidence of crashes, unique geometric conditions, lack of visibility, and speed of vehicles

In determining whether an intersection is warranted for a stop sign, based on the requirements of Council Policy 8-1, Department of Transportation (DOT) staff collects and analyzes a variety of traffic data, reviews collision reports, conducts field observations, and evaluates the presence of any special conditions. Traffic data collected includes daily vehicle volumes and the volume of traffic approaching the intersection, and vehicle speeds. Field observations include an assessment of the proximity of schools and other high pedestrian and bicyclist generators, any visibility constraints, unique roadway geometry, and evidence of crashes such as skid marks. For intersections on high volume Arterial or Collector streets, staff will also consider other factors, such as the proximity of existing and planned traffic signals, the congestion impacts associated with an all-way stop sign on the major street, and potential diversion of traffic to other streets.

Council Policy 8-1 Proposed Updates

This past year, DOT staff completed a review of Council Policy 8-1 and are recommending that the policy be updated to incorporate the proposed changes highlighted in Attachment A. The changes will bring the policy in alignment with City Council's adoption last year of the *San José Complete Streets Standards and Guidelines* and Council Policy 5-1, *Transportation Analysis Policy*; and prior Council action on the consolidation of various Boards, Bureaus, and Commissions. The changes are also based on benchmarking staff conducted of stop sign installation guidelines used by other 25 other cities. The changes proposed to Council Policy 8-1 include the following:

- Eliminate the cap on warrant points for both volume conflicts and proximity to schools.
- Increase the warrant points for intersections immediately adjacent to schools.
- Use "Arterial or Collector" and "Local" streets terminology in lieu of "General Plan" and "Non-General Plan" streets.
- One-Way, Two-Way, and All-Way for Local Street Analyses: expand the time period for review of crashes to a consecutive 24-month period in the 3 years prior to the study.
- All-Way for Arterial or Collector Street Analysis: expand the time period for review of crashes to a consecutive 12-month period in the 3 years prior to the study.
- Provide flexibility for low-volume Arterial or Collector streets (less than 6,000 vehicles per day) to be analyzed using the All-Way for Local Street Analysis criteria.
- Include consideration of the proximity of Community Centers and Commercial Centers as a high pedestrian and bicycle activity venue.
- Include consideration of prevailing (85th percentile) speeds, 4 mph or more above the posted speed limit, in lieu of average speed levels.
- For All-Way: Local Street Analysis in residential neighborhoods, include consideration of the street network and the proximity of the studied intersection to other stop signs or traffic signals.
- Eliminate the requirement to determine the Level of Service for the intersection to evaluate peak hour congestion impacts.
- Replace references to 'Traffic Appeals Commission' with 'Appeals Hearing Board'.
- Remove references to 'Level of Service' and where appropriate, replace with 'Transportation Analysis Policy'.
- Incorporate more information related to the appeals process described in SJMC 11.08.

SJMC Section 11.18 Proposed Amendments

The proposed amendments to SJMC Section 11.18, highlighted in Attachment B, reflect that the Department of Transportation (and not Streets and Traffic Department) is responsible for

conducting stop sign studies and installations, and that stop sign installation appeals are heard by the Appeals Hearing Board (not the Traffic Appeals Commission).

EVALUATION AND FOLLOW-UP

If the proposed updates to Council Policy 8-1 are approved, DOT staff will review intersections studied over the prior three years that were not warranted for stop control under the existing council policy to determine if stop control is warranted with the updated policy. For intersections warranted under the new policy, staff will install the stop control.

POLICY ALTERNATIVES

Council could choose to not approve the proposed changes to Council Policy 8-1. If the updates are not approved, DOT will continue to use the criteria outlined in the existing policy to determine if stop signs are warranted at studied intersections.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the Council agenda.

COORDINATION

This memorandum has been coordinated with the Police Department, the City Attorney's Office, and the City Manager's Budget Office.

COMMISSION RECOMMENDATION/INPUT

There is no commission recommendation on this action at this time.

COST SUMMARY/IMPLICATIONS

No additional funding is required. Existing funding from DOT's Personal Services and Non-Personal appropriations will support one-time costs incurred to conduct stop studies and install signs and markings for warranted installations.

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CEQA

Not a Project, File No. PP17-008, General Procedure & Policy Making resulting in no changes to the physical environment.

/s/

JOHN RISTOW

Acting Director of Transportation

For questions please contact Laura Wells, DOT Acting Assistant Director, at 408-975-3725.

Attachments

City of San José, California

COUNCIL POLICY

TITLE CRITERIA FOR THE INSTALLATION OF STOP SIGNS	PAGE 1 of 4	POLICY NUMBER 8-1
EFFECTIVE DATE April 3, 1972	REVISED DATE January 29, 2019	
APPROVED BY COUNCIL ACTION 4/3/72; 7/5/79—Item 9a; Ordinance Nos. 204 & 20500 adopted 2/10/81 5/7/85—Item 12a; 3/22/94—Item 9l; 4/3/01, Item 6.3, Resolution No. 70257.		

BACKGROUND

Stop signs are installed to establish right-of-way at intersections between motorists, cyclists, and pedestrians, reduce delay, and enhance safety for all roadway users.

PURPOSE

To state Council Policy relative to the designation of stop intersections.

POLICY

It is the policy of the City Council that the City install stop signs in locations where the City Traffic Engineer, in the exercise of his/her engineering judgment, determines that such installation is appropriate. The City Traffic Engineer should consider installation of a stop sign at an intersection that meets or exceeds the minimum guidelines set forth in this Policy. Potential conflicting City policies such as the Transportation Analysis Policy, shall be considered, and may form the basis for the denial of stop signs despite other justifying factors. It is also the policy of the City Council that stop signs be installed at intersections as authorized by the City Traffic Engineer under the direction of the City Council or the Appeals Hearing Board. In addition, stop signs are placed at entrances to through highways designated by the City Traffic Engineer or at intersections designated by the City Traffic Engineer as stop intersections in accordance with Title 11, Chapter 11.36, Sections 11.36.030 and 11.36.035 of the Municipal Code.

CRITERIA FOR INSTALLATION OF STOP SIGNS

A. Two-Way (or One-Way) Stop Sign Analysis.

The City Traffic Engineer should consider installation of two-way (or one-way) stop signs if an intersection obtains a minimum of 18 points as determined below:

1. **Volume Conflicts**
 - a. **Higher Volume Street:** One point for every 100 vehicles per day entering the intersection in excess of 600 vehicles per day.
 - b. **Lower Volume Street:** One point for every 100 vehicles per day entering the intersection in excess of 300 vehicles per day.
2. **Visibility Conditions** - One point for each MPH that the safe approach speed to the intersection is less than 20 MPH.
3. **Crash History** - Six points for each crash during any consecutive 24-month period within the three years prior to investigation that might have been prevented by the vehicle(s) complying with properly placed stop signs.

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4. **School Warrant** - Points shall be assigned for the intersection being adjacent to or within two blocks from the school (kindergarten to twelfth grade). If an intersection is adjacent to or within two blocks of several schools, then additional points will be assigned using the same point distribution:

INTERSECTION	SCHOOLS
Adjacent	4 points
One Block	2 points
Two Block	1 point

5. **Special Conditions (maximum 9 points)** - Points may be assigned considering the severity of:
- High pedestrian and bicycle activity because of proximity to recreational facilities including school facilities, parks, senior centers, high-density housing, neighborhood library or community center, commercial center, transit stops, and other facilities that generate high pedestrian and bicycle activity;
 - Prevailing (85th percentile) speed is four (4) miles per hour or more in excess of the posted speed limit;
 - Visual signs of emergency maneuvers such as skid marks and crash debris;
 - Unique geometric conditions exist.

B. All Way Stop Sign Analysis for Local Streets.

The criteria for the all-way stop analysis recognizes that delays are superseded by the desire to reduce potential crashes. An intersection qualifies for this analysis if neither street is an Arterial or Collector, and does not exceed an average daily traffic volume of 6,000. The installation of all-way stop signs should be considered if the intersection obtains a minimum of 20 points as determined below.

- Volume Conflicts** - One point for every 100 conflicting movements per day in excess of the first 400 conflicting movements for a four-way intersection. One point for every 100 conflicting movements per day in excess of the first 300 conflicting movements for a three-way intersection.
- Crash History** - Six points for each crash during any consecutive 24-month period within the three years prior to investigation that might have been prevented by the vehicles complying with properly placed stop signs.
- School Warrant** - Points shall be assigned for the intersection being adjacent to or within two blocks from the school (kindergarten to twelfth grade). If an intersection is adjacent to or within two blocks of several schools, then additional points will be assigned using the same point distribution:

INTERSECTION	SCHOOLS
Adjacent	4 points
One Block	2 points
Two Block	1 point

4. **Special Conditions (maximum 12 points)** - Points may be assigned considering the severity of:
- High pedestrian and bicycle activity because of proximity to recreational facilities including school facilities, parks, senior centers, high-density housing, neighborhood library or community center, commercial center, transit stops, and other facilities that generate high pedestrian and bicycle activity;
 - Intersections within a pedestrian corridor or zone as identified in the General Plan;
 - Prevailing (85th percentile) speed is four (4) miles per hour or more in excess of the posted speed limit;

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- d. Visual signs of emergency maneuvers such as skid marks and crash debris;
- e. Unique geometric conditions exist;
- f. Visibility concerns exist.
- g. In residential neighborhoods, there is not an existing stop sign or traffic signal on the higher volume street within a distance of 800 feet, and the intersection has streets extending 800 feet or more away from the intersection on at least three sides.

C. All-Way Stop Sign Analysis for Arterial or Collector Streets.

The criteria for Arterial or Collector streets recognizes the desire to enhance safety and reduce potential crashes and the desire to minimize unnecessary delays. When the average daily traffic on the major street is 6,000 vehicles or less, the City Traffic Engineer may analyze the intersection using the All-Way Stop Sign Analysis for Local Streets. The City Traffic Engineer should consider installing all-way stop signs if the intersection obtains a minimum of 28 points as determined below:

1. **Volume Conflicts and Overall Delays** – Points assigned in accordance with the following table:

Higher Volume Approach Four-Hour Volume	Points	Lower Volume Approach Four-Hour Volume	Points
0 — 1,400			
1,401 — 1,700	1	600 — 800	1
1,701 — 2,000	2	801 — 1,000	2
2,001 — 2,300	3	1,001 — 1,200	3
2,301 — 2,600	4	1,201 — 1,400	4
2,601 — 2,900	5	1,401 — 1,600	5
2,901 — 3,200	4	1,601 — 1,800	6
3,201 — 3,500	3	1,801 — 2,000	7
3,501 — 3,800	2	2,001 — 2,200	8
3,801 — 4,100	1	2,201 — 2,400	9
4,101 — Over	0	2,401 — Over	10

2. **Delay on Higher Volume Street** - Points assigned in accordance with the following table:

**Higher Volume Street to Lower Volume Street
24-Hour Volume Ratio**

Volume Ratio	Points
1.0:1 to 1.4:1	5
1.5:1 to 1.9:1	4
2.0:1 to 2.9:1	3
3.0:1 to 3.9:1	2
4.0:1 to 4.9:1	1
Greater than 5.0:1	0

3. **Crash History** - Six points for each crash during any consecutive 12-month period within the three years prior to investigation that might have been prevented by the vehicles complying with properly placed stop signs.
4. **School Warrant** - Points shall be assigned for the intersection being adjacent to or within two blocks from the school (kindergarten to twelfth grade). If an intersection is adjacent to or within two blocks of several schools, then additional points will be assigned using the same point distribution:

INTERSECTION	SCHOOLS
Adjacent	4 points
One Block	2 points
Two Block	1 point

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5. **Special Conditions (maximum 12 points)** - Points may be assigned considering the severity of:
 - a. High pedestrian and bicycle activity because of proximity to recreational facilities including school facilities, parks, senior centers, high-density housing, neighborhood library or community center, commercial center, transit stops, and other facilities that generate high pedestrian and bicycle activity;
 - b. Intersections within a pedestrian corridor or zone as identified in the General Plan;
 - c. Prevailing (85th percentile) speed is four (4) miles per hour or more in excess of the speed limit;
 - d. Visual signs of emergency maneuvers such as skid marks and crash debris;
 - e. Low volume street;
 - f. Unique geometric conditions exist;
 - g. Visibility concerns exist.
6. The City Traffic Engineer shall consider the following items prior to installing all-way stop control on an Arterial or Collector street:
 - a. Whether the crash history for the intersection for that particular type of intersection (e.g., major collector/local controlled by two-way stop) is typical of other intersections of that type in the City;
 - b. The proximity of the subject intersection with existing traffic signals and planned traffic signals;
 - c. Whether the subject intersection is warranted for a traffic signal;
 - d. Possible diversion of through traffic due to delays caused by an additional stop onto other streets, particularly other local residential streets;
 - e. Impacts to peak hour congestion on the major (Arterial or Collector) street.

APPEAL OF DENIAL OF REQUEST FOR STOP SIGNS

If, after a citizen request to install stop signs at a particular intersection, the City Traffic Engineer decides for any reason not to install such stop signs, then the Appeals Hearing Board is authorized, pursuant to the San José Municipal Code, to hear an appeal. If, after hearing all the facts presented to it on appeal, the determines that installation of a stop sign is appropriate and safe, then it shall order the City Traffic Engineer to install such stop sign. The Appeals Hearing Board shall order the installation of a stop sign that does not meet the warrants set forth in this Council Policy only upon making a specific written determination that installation of such stop sign is consistent with the public safety. The City Traffic Engineer shall be authorized to install stop signs as directed by the Appeals Hearings Board.

Chapter 11.18

STOP SIGN INSTALLATION

11.18.010 Installation of stop signs.

A. The director of transportation may initiate studies to determine if stop signs should be installed or removed at any particular location within the city. The director will consider requests by members of the public and other governmental agencies in determining which studies are to be conducted.

B. The director may direct that a stop sign be installed at or removed from any location for which a study has been conducted when the director determines in his or her professional judgment that the stop sign is warranted or is no longer warranted.

C. Whenever the director determines not to install or remove a stop sign as requested by a member of the public or other governmental entity, the requestor shall be notified by mail of the determination.

D. No request for removal of a stop sign shall be considered by the director within twelve months from the denial of an appeal for a stop sign installation at the same location by the appeals hearing board or city council.

E. No request for removal of a stop sign shall be considered by the director within twelve months of its installation.

11.18.020 Appeal of stop sign installation or removal

A determination of the director to install or remove a stop sign may be appealed to the appeals hearing board by any person by filing a written notice of appeal with the department of transportation within sixty days of the installation or removal of the sign. The appeals hearing board shall hold a public hearing on the appeal as provided in Section 11.18.050.

11.18.030 Appeal of stop sign denial.

A. A determination by the director to deny a request for installation or removal of a stop sign may be appealed to the appeals hearing board by any person by filing a written notice of appeal with the department of transportation within sixty days of the deposit in the mail of the determination by the director. The appeals hearing board shall hold a public hearing on the appeal as provided in Section 11.18.050.

B. The form for the notice of appeal shall be available from the department of transportation.

C. Such notice of appeal shall set forth the specific grounds for the appeal.

11.18.040 Notice of hearing.

Whenever the appeals hearing board or the city council holds a public hearing under this chapter:

A. Notice of time, place and purpose of such hearing shall be mailed to the requester at the address designated for such purpose in the notice of appeal. Such notice of hearing shall also be provided to any person who files a separate written request for such notice of hearing pursuant to subsection F. below.

B. A notice of hearing by the appeals hearing board shall be provided by the director and shall be mailed, postage prepaid, at least seven calendar days before the date for hearing, to those persons specified in subsection A. above.

C. A notice of hearing by the city council under Section 11.18.060 shall be mailed by the city clerk, postage prepaid, at least seven calendar days before the date set for the hearing, to those persons specified in subsection A. above. The form of such notice of hearing shall be as provided by the director.

D. Nothing herein shall preclude the city from providing additional notice to other persons or in any manner not expressly set forth herein.

E. Notwithstanding the above provisions, the failure of the director or city clerk to mail any notice, or the failure of any person to receive the same, shall not affect, in any way whatsoever, the validity of any proceedings taken under this chapter, nor any action or decision of the appeals hearing board or city council taken or made in any such proceedings, nor prevent the appeals hearing board or city council from proceeding with any hearing at the time and place set therefor.

F. Any person may file a request for notice of hearing form with the director of transportation referencing the specific stop sign location. The form for the request for notice of hearing shall be available from the department of transportation.

11.18.050 Hearing by appeals hearing board.

A. The director shall, subject to the rules of the appeals hearing board, set a date for the public hearing to be held by the board. Said date of hearing shall be at least ten days after the date such hearing was set by the director.

B. Prior to the hearing, the director shall provide a report and recommendation to the board together with all relevant papers, documents and exhibits which are part of the department of transportation file.

C. The director may make an oral presentation at the hearing.

D. The requestor shall present to the appeals hearing board at the hearing all relevant evidence including, but not limited to, pictures, studies and oral testimony which the requestor wishes the appeals hearing board to consider.

E. Within a reasonable time after the board has concluded its hearing, it shall announce its decision in the matter.

F. The decision of the board shall be mailed to the requester, at the address shown on the notice of appeal, and to all persons who have requested notice pursuant to Section 11.18.040F. above, at the address shown on the request for notice of hearing filed with the department of transportation.

11.18.055 Reevaluation of appeals hearing board decision.

The appeals hearing board may reevaluate any decision by it to install or remove a stop sign. Any such reevaluation may be initiated by any person, but only after the original appeals hearing board decision has been in place for twelve months. The procedure to be used to initiate the reevaluation shall be as follows:

A. Any person may file a written notice for reevaluation with the department of transportation after twelve months of implementation of the original decision.

B. The form for the notice of reevaluation shall be available from the department of transportation.

C. The notice of reevaluation shall set forth the specific grounds for reevaluation.

D. The notice of hearing shall be in conformance with proceedings set forth in Section 11.18.040.

E. Hearing by the appeals hearing board shall be in conformance with procedures set forth in Section 11.18.050.

11.18.060 Appeal to city council.

A. Any decision by the appeals hearing board under this chapter may be appealed to the city council by the requester or any member of the public by filing with the director of transportation a written notice of appeal to the city council within ten days after a copy of the decision of the appeals hearing board has been placed in the mail to the requester and any other person who has requested notice under Section 11.18.040.F.

B. The form for the notice of appeal to the city council shall be available from the department of transportation.

C. When such notice has been received by the director for filing, the director shall, within twenty calendar days of receipt of the notice of appeal to the city council, file a copy of the notice with the city clerk.

D. If a notice of appeal to the city council has been received by the director of transportation, the decision of the appeals hearing board shall be of no force or effect unless the appeal is withdrawn prior to the hearing before the city council.

E. Prior to the hearing, the director shall provide a report and recommendation to the council together with all relevant papers, documents and exhibits which were part of the appeals hearing board record.

F. The city council shall hold at least one public hearing on the matter. The city clerk shall set the date of the public hearing by the council, which date shall be not less than ten days after the date on which the copy of the notice of appeal to the city council was filed with the city clerk.

G. The city council shall adopt a resolution setting forth its determination in the matter. The decision of the city council shall be final.

H. The director shall mail a copy of resolution of the city council to the requester, and any other person who has requested notice under Section 11.18.040.F. above, at the addresses shown for such purpose on the notice of appeal to council or request for notice of hearing form.